

ABSTRACT

A system and method are provided for reducing the time delay associated with compensating for fading effects. The system includes a base station and a mobile station in communication. The base station transmits information and a pilot signal to the mobile station through each of the channels. The mobile station receives the information as noisy information and the pilot signal as a noisy pilot signal from each of the channels and compares the received noisy pilot signals to determine and predict a weight to be assigned to each of the channels. The calculated predicted weights are transmitted from the mobile station back to the base station as predicted feedback information that is utilized by the base station to alter the characteristics of the modulated carrier signal prior to transmission.